



Brasier, M. J., Grant, S. M., Trathan, P. N., Allcock, L., Ashford, O., Blagbrough, H., Brandt, A., Danis, B., Downey, R., Eléaume, M. P., Enderlein, P., Ghiglione, C., Hogg, O., Linse, K., Mackenzie, M., Moreau, C., Robinson, L. F., Rodriguez, E., Spiridonov, V., ... Griffiths, H. J. (2018). Benthic biodiversity in the South Orkney Islands Southern Shelf Marine Protected Area. *Biodiversity*.
<https://doi.org/10.1080/14888386.2018.1468821>

Peer reviewed version

Link to published version (if available):
[10.1080/14888386.2018.1468821](https://doi.org/10.1080/14888386.2018.1468821)

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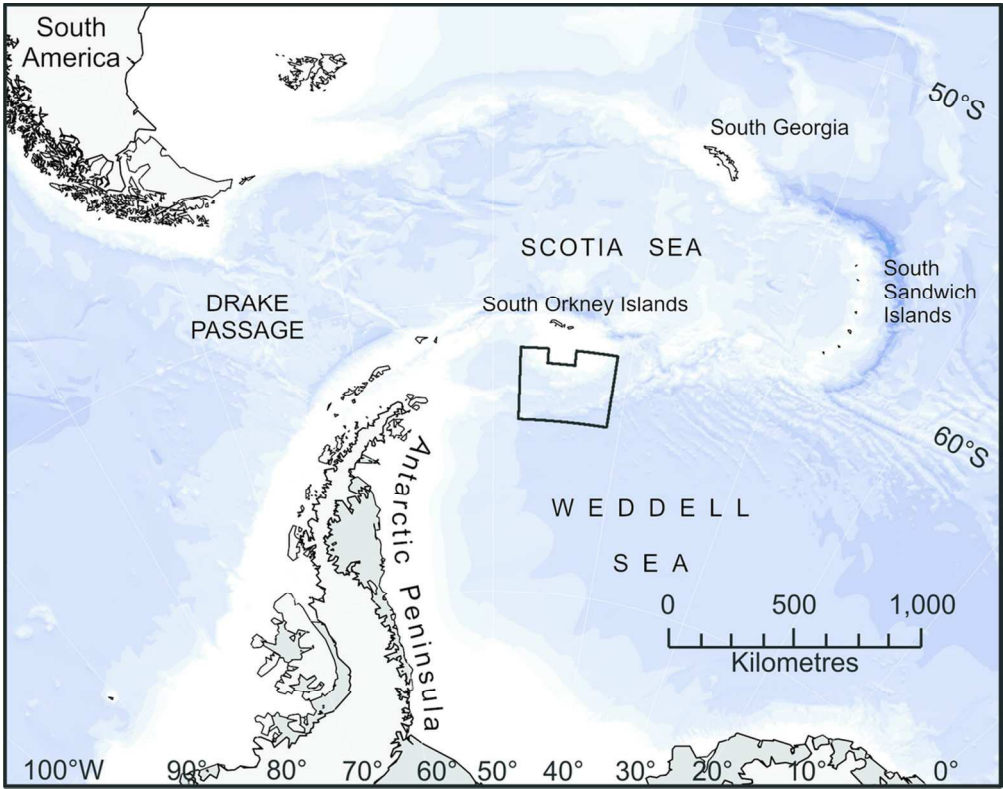


Figure 1. Location of the South Orkney Island Shelf Shelf marine protected area.

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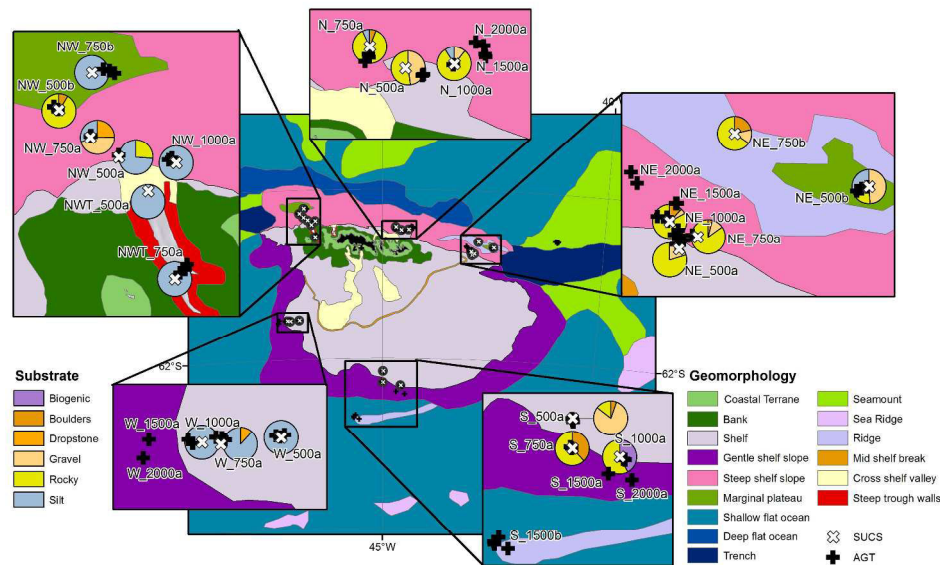


Figure 2. Location of the SUCS and AGT deployments of the SO-AntEco expedition by region, depth and set, with geomorphic classification from Dickens et al. (2014) and percentage cover of substrate type (averaged within each SUCS set). N = North, NE = North East, NW = North West, NWT = North West Trough, W = West and S = South.

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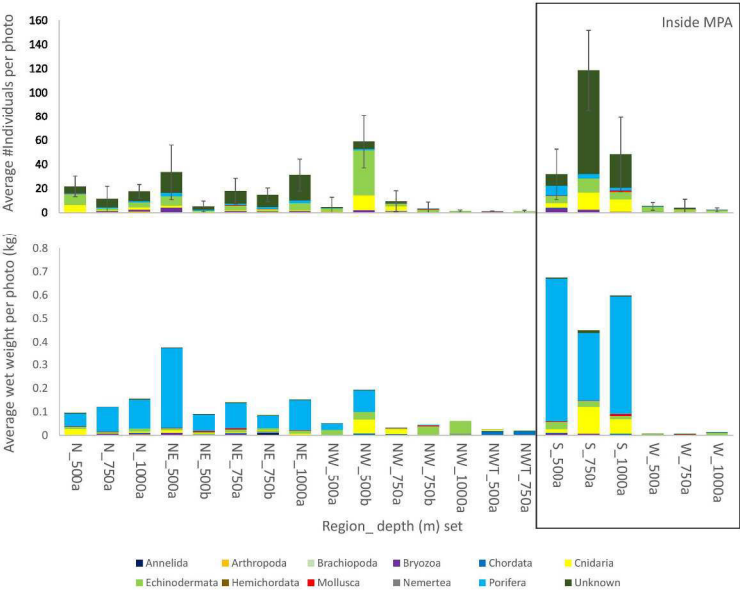


Figure 3. Average number of individuals (upper) and wet weight per photo (0.51m2) (lower) per phylum by set. Unknown phyla include both encrusting species and unidentified VME taxa. Error bars for weight are too high to include in the plot. Box indicates sampled locations within the MPA.

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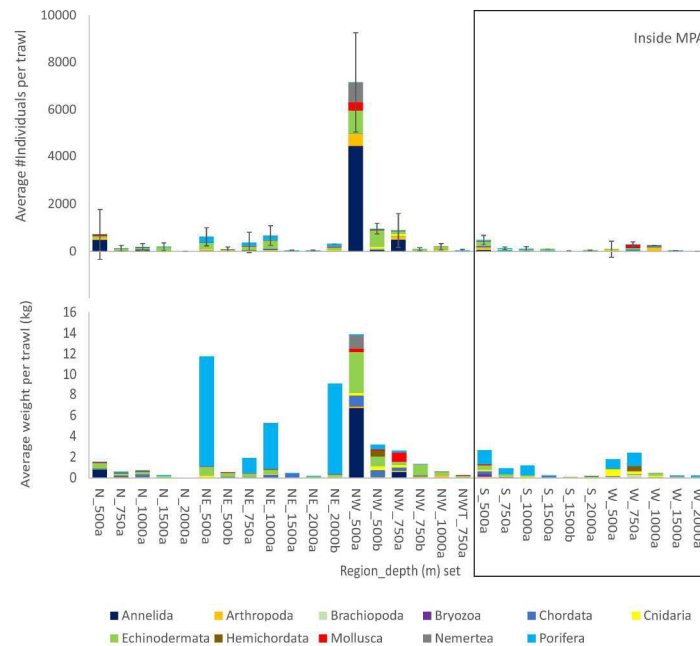


Figure 4. Average number of individuals (upper) and wet weight per trawl (lower) per phylum by set. Each trawl was standardised to 1200m² prior to analyses. Box indicates sampled locations within the MPA.

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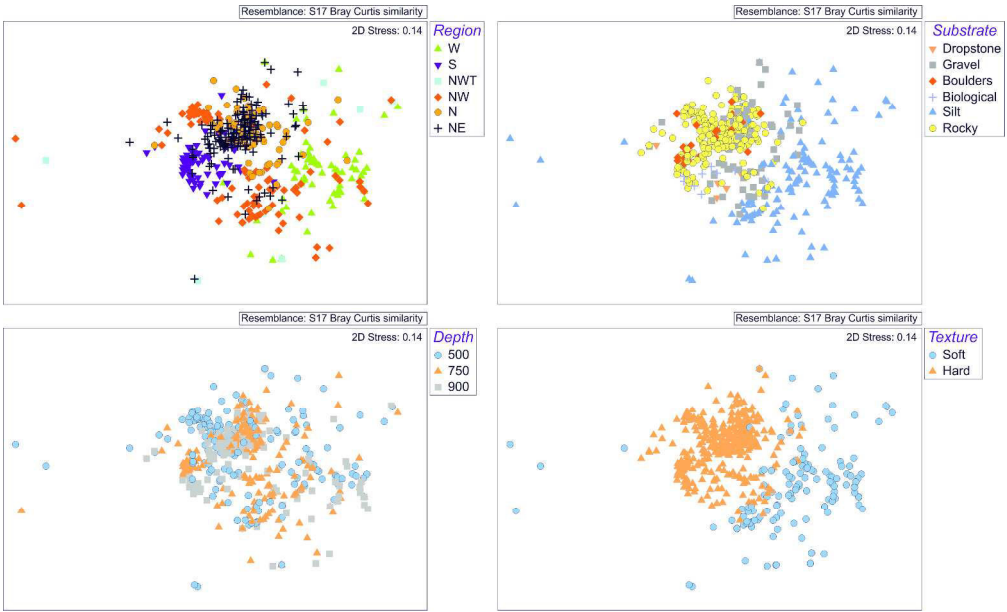


Figure 5. MDS of region, substrate, depth and texture of SUCS species assemblages.

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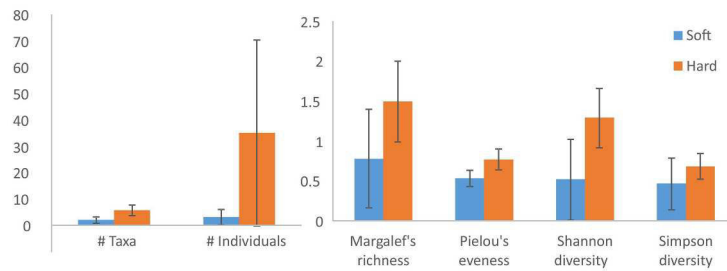


Figure 6. Average abundance of taxa and individuals (left) with average diversity indices (right) from SUCS imagery by texture with standard deviation.

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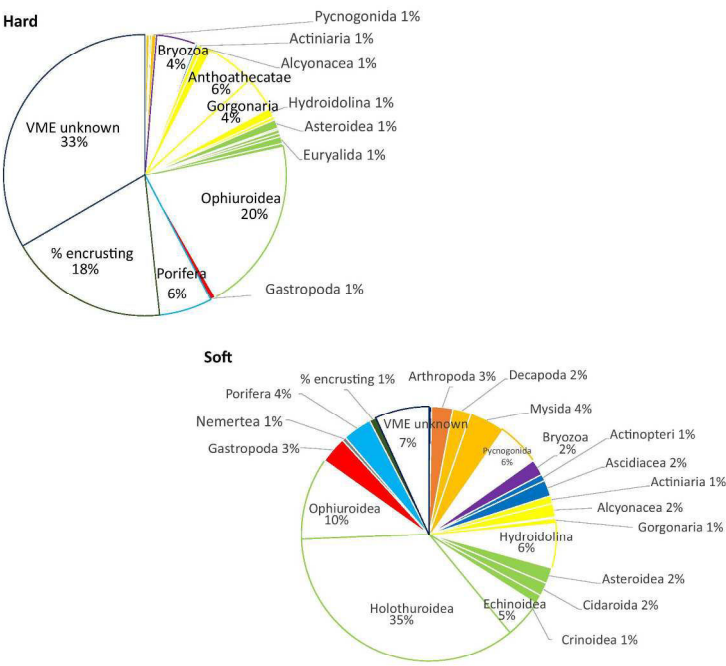


Figure 7. Proportional abundance of taxa from SUC imagery averaged by texture. Taxa coloured by phyla, phyla with <1% not shown.

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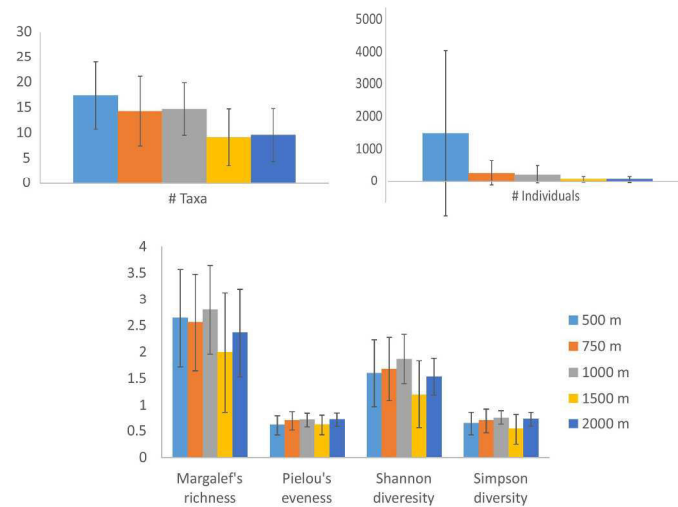


Figure 8. Average abundance and diversity indices from AGT data by depth with standard deviation.

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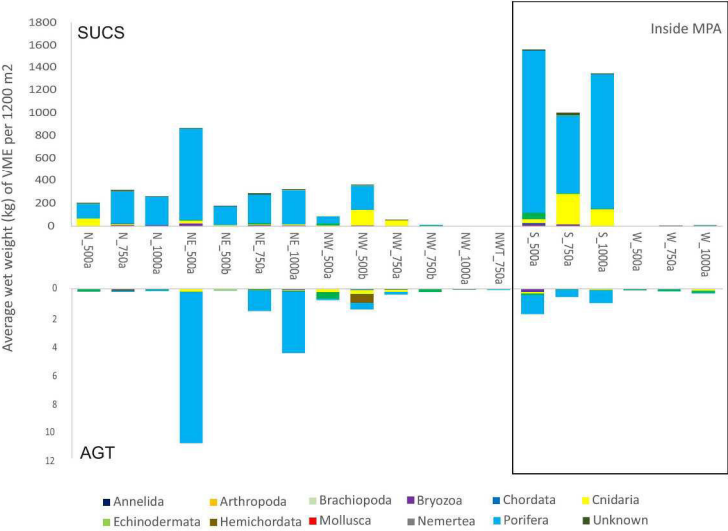


Figure 9. Average wet weight of VME taxa by phyla by set for both SUCS (upper) and AGT (lower). Box indicates sampled locations within the MPA.

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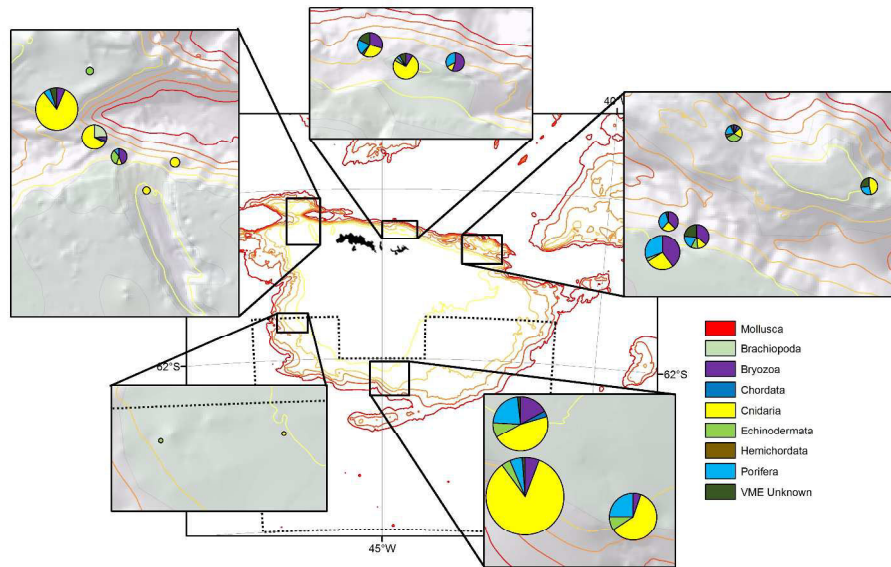


Figure 10. The relative abundance of large VME taxa averaged by SUCS set, size of pie chart proportional to the abundance recorded.

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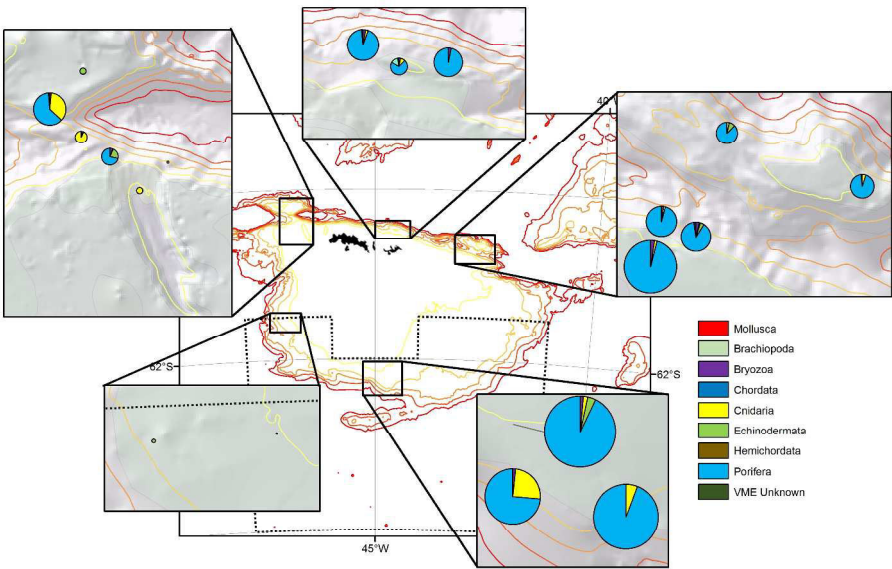


Figure 11. The relative wet weight of large VME taxa averaged by SUCS set, size of pie chart proportional to the total wet weight recorded.

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